

CLAIMS

What is claimed is:

- 427/180
ECC
5
- SUBA
B₁
1. A method for making a film for use with a heat transfer component comprising the

steps of:

applying a plurality of polar particulates to a first surface of a film;

adhering said plurality of polar particulates to said first surface of said film; and

then adding said film to said heat transfer component.

- 10
2. The method as recited in claim 1 wherein said film is thermoplastic.

- 15
3. The method as recited in claim 2 further comprising the steps of:

heating said film; and

cooling said film.

- 20
4. The method as recited in claim 3 wherein the step of adhering said plurality of particulates comprises embedding said plurality of polar particulates into said heated first surface of said film by a roller assembly.

5. The method as recited in claim 1 wherein the step of adhering said plurality of polar particulates comprises pressing said plurality of particulate into an adhesive substance applied on said first surface of said film.

6. The method as recited in claim 1 wherein the step of adhering said plurality of polar particulates comprises pressing said plurality of particulate into a mixture of reactants applied on said first surface of said film.
- 5 7. The method as recited in claim 1 further comprising the step of coating an outer surface of said plurality of polar particulates to enhance adhesion of said plurality of polar particulates to said first surface of said film.

END
B₁

8. A film to improve wettability of a surface within a heat exchanger comprising:
a film substrate having a first surface; and
a plurality of polar particulates adhered to said first surface of said film substrate.

- 5 9. The film as recited in claim 8 wherein said film substrate is thermoplastic.

10. The film as recited in claim 9 wherein said film substrate is heated, and said plurality
of polar particulates is adhered to said first surface of said film substrate by
embedding said plurality of polar particulates into said heated first surface of said
10 film substrate.

11. The film as recited in claim 8 wherein said plurality of polar particulates is adhered to
said first surface of said film substrate by an adhesive substance applied on said first
surface of said film substrate.

15

12. The film as recited in claim 8 wherein said plurality of polar particulates is adhered to
said first surface of said film substrate by a mixture of reactants applied on said first
surface of said film substrate.

- 20 13. The film as recited in claim 8 wherein a material coats an outer surface of said
plurality of polar particulates to enhance adhesion of said plurality of polar
particulates to said first surface of said film substrate.

14. A heat exchanger assembly comprising:

a plurality of condensing flow passages having a metal surface; and

a film to improve wettability of said metal surface of said heat exchanger including a
film substrate having a first surface and a second surface adhered to said metal surface,
5 and a plurality of polar particulates adhered to said first surface of said film substrate.

15. The assembly as recited in claim 14 wherein said film substrate is thermoplastic.

16. The assembly as recited in claim 15 wherein said film substrate is heated and said
10 plurality of polar particulates is adhered to said first surface of said film substrate by
embedding said plurality of polar particulates into said heated first surface of said
film substrate.

17. The assembly as recited in claim 14 wherein said plurality of polar particulates is
15 adhered to said first surface of said film substrate by an adhesive substance applied on
said first surface of said film substrate.

18. The assembly as recited in claim 14 wherein said plurality of polar particulates is
adhered to said first surface of said film substrate by a mixture of reactants applied on
20 said first surface of said film substrate.

19. The assembly as recited in claim 14 wherein a material coats an outer surface of said plurality of polar particulates to enhance adhesion of said plurality of polar particulates to said first surface of said film substrate.

A